

## CLIMATOLOGICAL DATA FOR NOVEMBER, 1912.

## DISTRICT No. 6, MISSOURI VALLEY.

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## GENERAL SUMMARY.

Dry and warm weather prevailed in all parts of the district. There was almost an entire absence of the rain and snow storms, followed or accompanied by abrupt temperature changes, that are usual during this season of transitory weather conditions, and in every State of the drainage area mild, sunshiny weather made the month appear more like October than November. All out door pursuits progressed favorably. In the corn-growing sections the large crop was gathered under almost ideal conditions and at the end of the month most of it had been cribbed. Late thrashing in the Dakotas, which had been delayed locally by occasional rains in October, was brought to a close. In the grazing regions cattle fed on the range and a material saving in garnered stock-feed was effected. Among the few storms the most noteworthy were a thunderstorm at Clarinda, Iowa, on the 5th and a windstorm at Helena, Mont., on the morning of the 22d, when the wind attained a velocity of 70 miles per hour, which is by 10 miles the highest velocity on record at that station. Considerable damage was done to plate-glass windows and to buildings in course of construction.

## TEMPERATURE.

The excess in temperature was general. It was greatest in Nebraska, the Dakotas, and Montana, where the mean daily departure was  $6^{\circ}$  to  $8^{\circ}$  above the normal. In the remainder of the district the average daily excess ranged from about  $1^{\circ}$  to  $5^{\circ}$ . The 9th and 10th were the days that were warmest throughout the district, but in North Dakota and the Mountain States the 17th, 18th, and 19th formed a period that was just about as warm as the earlier one. The lowest temperatures of the month occurred at a large majority of the stations between the 24th and the 27th.

On October 31 there was, for the first 10 months of the year, a temperature deficiency in all parts of the district. In November this was reduced considerably, and in eastern South Dakota there is now a slight excess. In Colorado and Wyoming, where the November weather was not quite so warm, comparatively, as in the other States

of the drainage area, an average daily deficiency, since January 1, of about  $2^{\circ}$  still exists.

## PRECIPITATION.

The 11th-12th formed the only period of general precipitation, but in the Mountain States there was scattered precipitation during the early days of the month and after the 24th; and in Missouri there was rain at almost all stations on the 5th-6th. The greatest amounts for the month occurred in the southern third of the district, or in the territory lying to the south of a line drawn east and west through Omaha, Nebr. In this region there were a few localities with somewhat more than the normal fall. In the northern two-thirds of the district unusually dry weather prevailed, and in Nebraska and the Dakotas numerous stations had no precipitation at all. The snowfall was light. East of the foothills the amounts were quite scattered and were hardly more than flurries. In the mountains there was more rain than is usual in November. In Montana there was hardly any snow on the ground, even in the higher mountains, at the close of the month, and in Wyoming and Colorado the depth was less than the normal.

The regions of excess and deficiency in precipitation since January 1 are substantially the same that they were on October 31. The excesses, however, which prevailed in the mountain and foothill country and along the eastern edge of the district, are not as great as they were a month ago, and the deficiencies in the territory between the regions of excess, or between the Missouri River and the foothills, have been increased. At St. Louis the total precipitation for the 11 months is 9.09 inches above the normal; at all of the other stations the departures, both excesses and deficiencies, are quite moderate.

## RIVERS.

The river stages declined gradually, but were not especially low, even at the close of the month. The Missouri River in the Dakotas usually freezes over in November, but it was still open on the 30th, although ice was running during the last few days of the month.































